UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/533,960	05/04/2005	Wen Zhao	PAT 799W-2	8081

26123 7590 11/17/2006

BORDEN LADNER GERVAIS LLP
WORLD EXCHANGE PLAZA
100 QUEEN STREET SUITE 1100
OTTAWA, ON K1P 1J9
CANADA

EXAMINER	
LY, NGHI H	

ART UNIT	PAPER NUMBER
2617	

DATE MAILED: 11/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/533,960	ZHAO ET AL.	
	Examiner	Art Unit	
	Nghi H. Ly	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 September 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *2-10 and 12-27* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *2-10 and 12-27* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *10/06/06*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

The Art Unit location of your application in the USPTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Art Unit 2617.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 09/12/06 has been entered.

Claim Objections

2. Claim 27 is objected to because of the following informalities: Claim 27 recites "the the connection". Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 2-6, 9, 10, 12-16, 18 and 21-27 are rejected under 35 U.S.C. 102(e) as being anticipated by Hunzinger et al (US 6,501,947).

Regarding claims 12 and 21, Hunzinger teaches a method of automatically re-establishing a data connection on a wireless data network (see column 4, lines 37-40 and see Abstract), comprising: determining, at minimum fixed time intervals determined by a service check timer, the status of a previously established data connection (see column 2, lines 22-29, see "*timer*" and "*after a failed connection*", also see column 4, lines 8-16, see "an initial attempt to connect has failed" or column 4, lines 17-21, see "*the mobile station 106 was unable to communicate with the base station*" or see "*if the connection with the base station 104 is unsuccessful*"), automatically transmitting a connection request if the previously established data connection is determined to be lost (see column 2, lines 22-29, see "*timer*" and "*after a failed connection*", also see column 4, lines 8-16, see "an initial attempt to connect has failed" or column 4, lines 17-21, see "*the mobile station 106 was unable to communicate with the base station*" or see "*if the connection with the base station 104 is unsuccessful*"), and re-establishing the data connection if the transmitted connection request is accepted by the wireless data network (see column 2, lines 42-55).

Regarding claims 2 and 22, Hunzinger further teaches the wireless data network is a CDMA2000 network (see Abstract).

Regarding claim 3, Hunzinger further teaches determining that no data connection is established includes receiving a refusal of service message from the wireless data network (see column 2, lines 30-42).

Regarding claim 4, Hunzinger further teaches the refusal of service message is one of Retry Order, Reorder Order and a Release Order (see column 2, lines 30-42).

Regarding claim 5, Hunzinger further teaches further including initializing a back off timer on receipt of the refusal of service message (see column 2, lines 30-42).

Regarding claim 6, Hunzinger further teaches the refusal of service message is an Intercept Message (see column 2, lines 30-42).

Regarding claim 9, Hunzinger further teaches initializing the back of timer is based on a retry delay specified by the Retry Order (see column 6, lines 41-56).

Regarding claim 10, Hunzinger further teaches the back off timer is initialized to a time greater than or equal to the retry delay (see column 6, lines 41-56).

Regarding claim 13, Hunzinger further teaches determining the data connection status is preceded by initializing the service check timer (see column 4, lines 37-51).

Regarding claim 14, Hunzinger further teaches the step of automatically transmitting the connection request is performed upon expiry of a back off timer (see column 4, lines 37-51).

Regarding claim 15, Hunzinger further teaches the back off timer is initialized to a value based on a retry delay determined in response to a refusal of service message (see column 2, lines 30-42 and column 6, lines 41-56).

Regarding claim 16, Hunzinger further teaches determining the status of the previously established data connection includes comparing assigned network resources to default values (see column 2, lines 10-21).

Regarding claim 18 and 25, Hunzinger further teaches a step of forcing premature expiry of the service check timer upon receipt of a Release Order (see column 4, lines 37-40).

Regarding claim 23, Hunzinger further teaches the connection manager includes means to reset the back off timer in response to the receipt of one of a Retry Order, Reorder Order and a Release Order (see column 4, lines 37-51).

Regarding claim 24, Hunzinger further teaches the connection manager includes an accumulator for tracking consecutive rejections of service, and means to reset the back off timer in accordance with the number of consecutive rejections (see column 2, lines 30-42).

Regarding claim 26, Hunzinger further teaches the means to reset the back off timer includes means to reset the back off timer such that the back off time is greater than, or equal to, a retry delay determined in response to a Retry Order or a Release Order (see column 2, lines 30-42).

Regarding claim 27, Hunzinger further teaches the connection request is automatically transmitted upon detection of a new wireless data network (see column 4, lines 37-40 and Abstract).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hunzinger et al (US 6,501,947) in view of Marry et al (US 4,827,507).

Regarding claim 7, Hunzinger teaches claim 14. Hunzinger does not specifically disclose initializing the back off timer is based on a random seed.

Mary teaches initializing the back off timer is based on a random seed (see column 12, lines 1-21).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Mary into the system of Hunzinger in order to protect the exchange of keys and synchronization form interruptions in the communication channel (see Mary, column 2, lines 24-26).

Regarding claim 8, Hunzinger further teaches the back off timer is initialized to a time greater than or equal to any back off timer time calculated after a last established data connection (see column 4, lines 37-51).

8. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hunzinger et al (US 6,501,947) in view of Hunzinger (US 2002/0082032A1).

Regarding claim20, Hunzinger et al (US 6,501,947) teaches claim 12. Hunzinger et al (US 6,501,947) does not specifically disclose the connection request is an Origination Message.

Hunzinger (US 2002/0082032A1) teaches the connection request is an Origination Message (see [0007]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Hunzinger (US 2002/0082032A1) into the system of Hunzinger et al (US 6,501,947) in order to allow the infrastructure to adapt access parameter to increase or decrease the likelihood of successful access (see Hunzinger (US 2002/0082032A1), Abstract).

9. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hunzinger et al (US 6,501,947).

Regarding claim 17, Hunzinger teaches claim 16 except that the step of comparing includes determining that no data connection is established when an assigned Internet Protocol address is set to 0.0.0.0.0. However, such Internet Protocol

address is set to 0.0.0.0.0. would have been obvious since the particular Internet Protocol address could have been determined by the inventor's choice e.g., use an Internet Protocol address which can improve reconnection attempts in the communication network.

10. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hunzinger et al (US 6,501,947) in view of Official notice.

Regarding claim 19, Hunzinger teaches claim 18 except that the Release Order is a Point-to-point-protocol termination request. However, the Examiner takes Office notice that such feature as recited in the claim is very well known in the art.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teaching of Hunzinger for providing a method as claimed, for obtaining reconnection in communication network.

Response to Arguments

11. Applicant's arguments filed 09/12/06 have been fully considered but they are not persuasive.

On page 6 of applicant's remarks, applicant argues that "Hunzinger does not teach claim 12 and 21 and Hunzinger does not teach or suggest any procedure for determining if a connection has been lost, or for reestablishing a connection if the connection is lost subsequent to initial connection, nor does Hunzinger teach or suggest that such determinations be carried out at minimum fixed intervals".

In response, Hunzinger does indeed teach determining if a connection has been lost (see column 2, lines 22-29, see "*timer*" and "*after a failed connection*", also see column 4, lines 8-16, see "an initial attempt to connect has failed" or column 4, lines 17-21, see "*the mobile station 106 was unable to communicate with the base station*" or see "*if the connection with the base station 104 is unsuccessful*") or for reestablishing a connection if the connection is lost subsequent to initial connection (see column 2, lines 22-29, see "*timer*" and "*after a failed connection*"), or such determinations be carried out at minimum fixed intervals (see column 2, lines 22-29, see "*timer*" and "*after a failed connection*"). In addition, in response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "*for reestablishing a connection if the connection is lost subsequent to initial connection*") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

On page 8 of applicant's remarks, applicant argues that "Hunzinger fails to teach or suggest all the limitations of independent claims 12 and 21, and their respective dependent claims 2-6, 9, 10, 13-16, 18 and 22-25".

In response, Hunzinger does indeed teach independent claims 12 and 21, and their respective dependent claims 2-6, 9, 10, 13-16, 18 and 22-25. In addition, Applicant's attention is directed to the teaching of Hunzinger in independent claims 12 and 21, and their respective dependent claims 2-6, 9, 10, 13-16, 18 and 22-25.

Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nghi H. Ly whose telephone number is (571) 272-7911. The examiner can normally be reached on 8:30 am-5:30 pm Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha Banks-Harold can be reached on (571) 272-7905. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Nghi H. Ly